

Applicants: Guy Bemis et al.
Application No.: 10/781,015

REMARKS

Claims 1-34 are pending in the application. Claims 32 and 33 stand withdrawn as being drawn to a non-elected invention. Claims 1, 9, 30, and 31 have been amended. Support for the claim amendments can be found throughout the application as originally filed, including the claims. Importantly, no new matter has been added. Applicants reserve the right to pursue the amended subject matter in a continuing application under 35 U.S.C. § 120 or 121.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1-31 and 34 stand rejected under 35 U.S.C. § 112, second paragraph, based on the Examiner's contention that they fail to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the Examiner contends that the phrase "the comparison macromolecule has structural features homologous to the target macromolecule of 20% or greater nucleic acid and/or amino acid homology" is indefinite because it's unclear whether it means that the comparison macromolecule and the target macromolecule as a whole share 20% or greater nucleic acid and/or amino acid homology or certain "structural features" thereof share 20% or greater nucleic acid and/or amino acid homology. The Examiner also contends that the term "the acyclic portions" in claim 9 lacks antecedent basis. Applicants respectfully disagree with this rejection for the following reasons.

Applicants submit that claim 34 does not include the phrase "the comparison macromolecule has structural features homologous to the target macromolecule of 20% or greater nucleic acid and/or amino acid homology," or the similar, and therefore is definite.

Regarding claims 1-31, claims 1, 30, and 31 have been amended to include the phrase "structural features of the" before the term target molecule to clarify that it is the structural features of the comparison and target molecules that are being compared. Support for this type of comparison can be found on page 2, lines 27-28, where it states "[t]he macromolecules can have a homologous domain, e.g., a homologous catalytic domain."

Applicants: Guy Bemis et al.
Application No.: 10/781,015

Claim 9 has been amended to clarify the confusion between atoms and portions. Support for this amendment can be found on page 2, lines 13-15. One of ordinary skill in the art would know that a cyclic atom is an atom that is in a ring, and that an acyclic atom is an atom not in a ring. Cyclic portions connected by the acyclic atoms are portions that comprise cyclic atoms.

Applicants submit that claims 1-31 and 34, as amended, are definite and request the withdrawal of the rejection of claims 1-31 and 34 under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1-31 and 34 stand rejected under 35 U.S.C. § 112, first paragraph, based on the Examiner's contention that they fail to comply with the written description requirement. In particular, the Examiner contends that the phrase "the structural model of the query ligand is based on data from X-ray crystallography or NMR spectroscopy and the structural model of the target macromolecule is based on data from X-ray crystallography" in step a) of amended claim 1 is not supported. The Examiner states that "[a]pplicants did not specifically point out support in the specification for the limitation," and that "[a] review of the specification reveals that while the specification generally mentions data of molecules from X-ray crystallography or NMR, there's no specific description that could land support for the added limitation." Applicants respectfully disagree with this rejection for the following reasons.

Regarding support in the specification, Applicants in their response dated September 25, 2009, pointed out support for this limitation on page 8, lines 29-30, and continued onto page 9, lines 1-5, of the specification.

Regarding the adequacy of the description to support the limitation, Applicants submit that the Examiner's requirement of a "specific description" is an incorrect standard for the written description requirement. It is well established in patent law that specific descriptions are not required:

"The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter,

Applicants: Guy Bemis et al.
Application No.: 10/781,015

rather than the presence or absence of literal support in the specification for the claim language.

In re Kaslow, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983);

and

“A fairly uniform standard for determining compliance with the ‘written description’ requirement has been maintained throughout: ‘Although [the applicant] does not have to describe exactly the subject matter claimed, ...the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.’ *In re Gosteli*...’ [T]he test for sufficiency of support in a parent application is whether the disclosure of the application relied upon “reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter.”

Ralston Purina Co. v. Far-Mar-Co., Inc., 772 F.2d 1570, 227 USPQ 117 (Fed. Cir. 1985).

Applicants submit that one of ordinary skill in the art has a Ph.D. in computer modeling chemistry and years of computer modeling experience. Such a person would be familiar with using X-ray and NMR data for molecular modeling. Therefore, one of ordinary skill in the art would believe that Applicants were in possession of the claimed invention, including the X-ray and NMR data limitation. Applicants, therefore, have satisfied the written description requirement as established by accepted case law.

Applicants submit that claims 1-31 and 34 comply with the written description requirement and request the withdrawal of the rejection of claims 1-31 and 34 under 35 U.S.C. § 112, first paragraph.

Double Patenting

Claims 1-31 and 34 stand provisionally rejected of the ground of nonstatutory

Applicants: Guy Bemis et al.
Application No.: 10/781,015

obviousness-type double patenting as being unpatentable over claims 1-4, 6-12, 14-16, 19, 20, 24-39, and 42-46 of copending U.S. Application No. 10/790,507 (allowed but not issued). Applicants respectfully disagree with this rejection.

However, solely to expedite prosecution of the instant application to allowance, Applicants have filed a terminal disclaimer disclaiming patent term beyond that of U.S. Application No. 10/790,507.

Accordingly, Applicants request the withdrawal of the nonstatutory obviousness-type double patenting rejection of claims 1-31 and 34.

Applicants: Guy Bemis et al.
Application No.: 10/781,015

Fees

The Director is hereby authorized to charge any additional fee due, or credit any overpayment, in connection with this petition, to Deposit Account No. 50-0725.

Conclusion

Applicants request that the Examiner enter the above amendments, and allow the pending claims to pass to issue. If a call to Applicants' representative would help to expedite the prosecution of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

/Michael J. DiVerdi/
Michael J. DiVerdi, Ph.D. (Reg. No. 51,620)
Attorney for Applicants
c/o Vertex Pharmaceuticals Incorporated
130 Waverly Street
Cambridge, MA 02139-4242
Tel.: (617) 444-7503
Fax.: (617) 444-6483